G. R. S. IX-5]

Previous references. √ Preserve

1918:29

(fm.)

Later references.

21—

File No. 40-26

Serial Nos. 627

GENERAL AND REVENUE SECRETARIAT.

Serial Nos. 627

Part B for

SUBJECT.

Organization of the Indian Munitions Board.

W D 88—GPB—50,000—24-7-16

(1)

GENERAL AND REVENUE SECRETARIAT.

( )

NOTES.

File No. 110-18

FILE HEADING.

From

No.	Dated	Received

Diary No.	Enclos.	Spare Copies.	Serial No.

BRIEF ABSTRACT OF LETTER.

NOTES AND ORDERS.

NOTES—First Sheet.

GPB—30,000—12-8-11

G. R. S. III-2]

General and Revenue Secretariat. | File No. 40 of 1918-19.

D. O. 581/58

Office of the Director of Industries and Commerce,
Bangalore 20th July 1918

My dear Mr. Balasundaram,

With reference to Government Order No:1147-97/G.M.110-18-3 dated 18th July 1918, appointing me as Controller of Munitions, my functions are stated that I am to be a local representative of the Indian Munitions Board, and also a channel of communication ---- between it and the local agencies for the production of Munitions. In the enclosure sent along with this ---- communication, the functions of the provincial ------- controllers of Munitions are defined to be as being responsible for the minor industries, for collection of information and for the local application in suitable cases of the Defence of India Rules. From a further reference to the constitution of the offices of such local controllers of Munitions in other provinces, I find that the controller of Hide, Tanning materials &c. are placed under the controller of Munitions. I would like to be informed, if the same steps are to be taken

NOTE—Contn. sheet.

WD A 1769—GPB—60,000—20-9-18—S.

G. R. S. III-2]

General and Revenue Secretariat. | File No. of 191 .

D. O.

Office of the
Director of Industries and Commerce,
Bangalore 191 .

(2)

taken with regard to Mysore.

I would further like to be informed, if I could address the Indian Munitions Board, without the necessity of going through the Residency. If the file relating to the creation of this appointment is sent to me unofficially, I would like to return the same after perusal.

Yours sincerely,

V Ranganathaiyer

C. S. Balasundramier, Esq., B.A.,

Draft reply sent - The Connected file is under submission to His Highness for perusal.
Mg
22/7/18

NOTE—Contn. sheet.

WD A 1789—GPR—60 000—20-8-18—S

1414

G. R. S. III-2]

General and Revenue Secretariat.

File No. 140 of 1918-19

Serial No.

In perusal before issue

2nd member

23/7/18

Issue

24/7/18

To

NOTE—Conta. sheet.

N.N. 21-18
~~Cyn 110-18~~

No Mug 2013 (5)
dt 20-7-1918

V. Ramaswamy Esq
Offg Director of Industries
& Commerce in
Mysore.

Dear Sir,

In reply to your D.O. ~~letter~~ No 581 of the 20th July 1918, I am desired to state that as the Control of learning materials, in the State has been vested in a separate officer as the work connected therewith has already been organized in a self-contained manner, the Committee of Museums will deal with the ~~the~~ matter in Dr. Hulse's ~~absence~~ absence concerned with the

production of War Ma-
terials ..

2. ~~Re~~ the residency
has already been addressed
to ~~the necessary action~~
necessary for direct cor-
respondence between yourself
(the Indian Ministries Re)

The ~~Enclosed~~ Secret file
~~Mr. Subrein~~ is not available
at present - for being
sent to you -

Yours Sincerely

U/23/7/42

Rec'd
23.7.42

Note - This pamphlet is under

ORGANIZATION OF THE INDIAN MUNITIONS BOARD

(December 1917.)

The Indian Munitions Board was created, and undertook its formal duties as a Department of the Government of India with effect from the 1st April 1917, for the purposes of concentrating attention on the expansion of Indian sources of supply—primarily of war but also of civil requirements; of relieving certain other departments of overlapping duties in their relation to war supplies; of preventing injurious competition in buying between different Departments of the public service; and of aiding the British Ministry of Munitions by centralizing the scrutiny and standardizing the principles which regulate the disposal in India of applications for import of plant and stores of military significance from the United Kingdom.

It was necesssary to organize this department under war conditions so as to cause as little dislocation as possible among the various agencies already at work in supplying war stores. Hence its development, though relatively rapid, has been gradual, and has not been quite complete in that the Munitions Board, though taking over appropriate fragments of other departments as rapidly as its digestion permitted, has refrained from taking in departments that are already organized for war purposes in a self-contained manner, and whose work therefore does not clash seriously with that of other agencies. For instance the Board has not touched the arrangements made by the Commerce and Industry Department for the purchase of mica, or of jute. Nor has it hitherto been concerned in the administration of the Ordnance factories (though supplementing the capacity of these by arranging for large supplies of miscellaneous articles from outside). The control of the Ordnance Factories is however shortly to be vested in the Board owing to developments in the direction of new extensions which can best be administered by a department already in close relations with the principal iron works and engineering firms.

The work of the Board necessarily brings it into direct touch with the Army Department of the Government of India, and it has for this reason been placed under the immediate charge of His Excellency the Army Member of Council. It consists at present of a President assisted and advised by four Members, of whom one, the Financial Member, exercises also the functions of the Financial Adviser in the Army Department, while the others are whole time Members of the Board.

For a few weeks in the beginning of its organization the Board had the advantage of the advice of Sir Frederick Black, K.C.B., who with three assistants visited India for this purpose.

The activities of the department are distributed to well defined subject branches each under the administration of a Controller at headquarters. The subjects assigned to these branches are those in which important technical and commercial interests are independent of provincial boundaries. Each member of the Board is responsible for a group of Controllers. In addition to this headquarters staff Provincial Controllers have been appointed to act as the Board's representatives in each province. These Provincial Controllers are responsible for the minor industries, for the collection of information, and for the local application in suitable cases of the Defence of India Rules : under them are employed the necessary subordinate establishments entrusted with the purchase and despatch of miscellaneous supplies.

At present nine Controllers are attached to the headquarters staff. They deal respectively with the following branches of work :—

Industrial Intelligence ;

Overseas Military railway materials.

Inland Water Transport.

Timber supplies.
Indian Indents and Stores.
Hides and Wool.
Textiles and Clothing.
Priority and Home Indents.
Finance.

The Provincial organization now includes 9 Controllers, provided where necessary with deputies and assistants, whose areas of control correspond approximately to the following Presidencies and local Administrations :

Bombay.
Bengal.
Madras.
Burma.
The Punjab.
United Provinces.
Central Provinces and Berar.
Bihar and Orissa.
Karachi (local area).
Delhi.

The work accomplished by the Board can best be summarised by a short account of the work done in each of the headquarters branches ; for fuller particulars reference may be made to the Board's Weekly Progress Reports, copies of which are distributed for official use only.

Industrial Intelligence Branch :—The Controller of this Branch collects data regarding the present and potential resources of India, and advises on the possibility of developing and initiating the manufacture of articles required chiefly for public and military services. He has helped industrial concerns in the matter of obtaining of raw materials, and has also reviewed the local facilities for manufacture in India of chemicals which have hitherto been imported, with the result that arrangements have been made for organized research in chemical problems to be carried out at University and other laboratories. When any one or a group of these problems assumes sufficient importance and has been brought by the parent branch to a suitable stage of development, a subordinate subject branch is formed to foster its further growth, thus leaving the main branch free to turn its attention to fresh fields of industrial expansion.

Railway Materials Branch.—Prior to the inception of the Munitions Board the provision of materials for railways required by the expeditionary forces was in the hands of the Railway Board. This and the other responsibilities which the Railway Board had undertaken, such as the organization of the construction in India of craft for the Inland Water Transport in Mesopotamia and the recruitment of staff for overseas railways and the Inland Water Transport in Mesopotamia, had developed to such an extent that it had become necessary to form a special ' War Branch ' to deal with all war matters which the Railway Board were best equipped to undertake.

When the Munitions Board was formed the Railway Board's War Branch was taken over by it, being divided to form the Railways and Inland Water Transport Branches of the Munitions Board to deal respectively with all supplies to overseas railways and the Inland Water Transport. The Railway Branch of the Munitions Board now deals with the supply of rails, and fastenings, sleepers, bridging, rolling stock and any special plant required for railways in war areas, and it works in close co-operation with the Railway Board. The entire steel output of the Tata Iron and Steel Company is controlled by the Munitions Board through this Branch. Efforts are at present concentrated on producing

the maximum quantity of rails, and since April the tonnage of rails produced by the Tata Works has averaged 6,000 tons monthly. This supply alone has not been sufficient to satisfy the need for railway communications in all the theatres of war which India supplies, and as railways have already been depleted of practically all the spare permanent way material—new and second hand—which they had in stock, it has been necessary to dismantle a considerable mileage of open lines.

Special steps have been taken with the assistance of the Forest Department to increase the outturn of sleepers and it is expected that an ample supply of sleepers will shortly be assured.

The bulk of the rolling stock sent out of India has been metre gauge, and this has been drawn entirely from railways. Each railway helps in proportion to the total quantity of rolling stock in its possession. So, however, that the types of stock sent overseas may be as uniform as possible the stock required is now supplied by one or as few railways as practicable, and these are recouped by transfers from other lines to restore the balance of proportional supply.

To the end of October 1917, 1,232 miles of railway track, 179 engines and 3,682 vehicles have been supplied from India, and of the rolling stock, railways in India have given up 159 locomotives and 3,507 vehicles.

Inland Water Transport.—The principal work of this branch has been the construction of barges for Mesopotamia; since the creation of the Munitions Board, 71 barges have been completed. Of these, 52 have been constructed entirely in India, while 19 have been re-erected from plates and angles sent out from England and Canada. In addition, there are at present, in various stages of construction, 121 barges, of which 43 are 125 foot barges and 78 are 50 foot port barges. One hundred and ten anchor boats and 34 dinghys have also been constructed and despatched to Basrah.

Most of the work connected with the construction of rivercraft has been transacted with the help of the Rivercraft Board at Calcutta, with its Sub-Committees at the other principal ports. These bodies consist of representatives of the principal engineering and shipbuilding firms at each place with the addition of government representatives.

Questions of building ships, trawlers, tugs and other sea-going craft have also engaged the attention of this Branch, and as it is anticipated that this side of the work will undergo large developments, it is intended to form a new branch at Calcutta, under a Shipbuilding Controller who is being sent out from the Admiralty. A Marine Architect and an Engineer for internal combustion engines have already been appointed. The organisation of this new branch is now in hand.

Timber Supplies.—Prior to the institution of the Munitions Board, the timber supplied to forces in Mesopotamia, Egypt and elsewhere was largely imported. Since the Board took over the supply of timber in May 1917, only 15 tons of imported timber have been bought, as against many thousands of tons of Indian timber. There were, however, large stocks of imported timber and a few outstanding contracts. It is anticipated that the whole of this imported timber will be exhausted by the end of 1917, after which demands will be met almost entirely from Indian-grown timber. During the months of May to September, 1917, inclusive, the quantity of timber shipped by the Munitions Board has been 30,395 tons to Mesopotamia, 16,142 tons to Egypt and Salonika and small quantities to East Africa and Bunder Abbas.

The branch supplies not only overseas but also, to an increasing extent, Indian demands; and is investigating the question of the most suitable Indian timbers for use in aircraft construction and such special purposes as the manufacture of tea chests.

Indian Indents and Stores.—Need was felt, shortly after the Munitions Board was founded, for creating a special branch to meet the demands of overseas forces for engineering and miscellaneous stores which can be obtained in India, either from stock or by local manufacture. With this object the Indian

Indents Branch was established in June, 1917. The organisation consists of a Controller at headquarters, who receives all indents from overseas forces, which are then distributed for compliance to officers in the chief commercial centres of the country, all of whom work under the orders of the Controller at headquarters. This branch also arranges for the supply to military, civil and other Government departments of certain articles which are scarce or for other reasons difficult to obtain in India. In the short time since the branch has been formed, the following demands have been met:—

	Indents.	Items.
Mesopotamia	235	4,380
East Africa	29	1,530
Aden	30	467
Bander Abbas	8	83
Alexandria	4	16
Departments in India	88	823

Some of the "items" mentioned above are of considerable magnitude; for instance, single items have comprised such demands as for 10 miles of piping, for 5,000 tables, for 10 portable engines, for 1,500 tons of cement; it will therefore be realised that the Board is dealing with very large orders. As all the demands are being met from India's own resources, it will be clear that the operations of this branch must have a great influence on the manufacturing facilities of the country, and have made available, to the fullest extent, the stocks of imported articles which had accumulated in the country. There are indications, however, that the latter are being speedily reduced, to a dangerous degree and it may shortly become necessary to increase the demands on the United Kingdom. The experience gained and the development of manufacture will, however, enable the Board to reduce these to a minimum.

Assistance in meeting demands for special articles requiring manufacture and large indents for bolts and nuts, is obtained from the Albion Factory, and the Kutra Ironworks, two workshops in Calcutta which are managed under the orders of the Controller of Munitions, Bengal.

Hides and Wool.—The Controller in charge of this Branch directs the purchases of tanned hides (East India kips) in India on behalf of the War Office, and of raw hides on behalf of the War Office and the Italian Government. Purchases of tanned hides are made at Madras from approved firms on an f.o.b. basis, and at Bombay direct from the tanners by the local Deputy Controllers (Hides). Purchases of raw hides are made at present through a Committee of buyers at Calcutta with a Sub-committee at Karachi. Some idea of the magnitude of the operations may be obtained from the fact that the shipments of tanned hides during the six months from the 1st April 1917 to 30th September 1917 totalled 187,404 cwts. valued at Rs. 2,56,86,939. In the same period 136,059 cwts of raw hides were exported to the United Kingdom valued at Rs. 99,81,020 and 69,238 cwts. valued at Rs 56,22,555.

The Branch has not been concerned with any supplies either to the Mesopotamian Expeditionary Force or to forces in Egypt. With regard to forces in India it has arranged to purchase and supply to Messrs. Cooper Allen & Coy., who are engaged in the manufacture of Army Boots 35,000 roughtanned hides a month from Bombay, and about 8,000 monthly to the Government Harness and Saddlery Factory at Cawnpore.

For the tanning of hides suitable for Army requirements uniform prices have been fixed, and some tanneries that were not run on satisfactory lines have been either placed under control, or taken over for actual management. There has been, however, a marked improvement in the work done, mainly due to the tanners being forced to work to a uniformly high standard.

The Board has taken over the control of a small tannery at Maihar (Central India), with a view of conducting experiments with new tanstuffs, new combinations of recognized tanstuffs, and new processes. When they prove to be successful on an experimental scale, the new processes will be carried out on a commercial scale at the Allahabad Tannery, which has been purchased and is now being enlarged. The experimental tannery is placed under the control of a committee of trade representatives. Results which are proved to be successful will be communicated to the tanners in other parts of India, and it is hoped that this organization will result in a general improvement in the tanning industry, which should thus remain firmly established.

Agents are employed for the purchase of wool imported from Tibet through Kumaon and through Sikkim for use in the mills in Upper India. The system of regular purchase at fair and fixed prices has encouraged the inflow of wool from Tibet, and during the past season we obtained over 3,000 tons from this source.

Textiles and Clothing.—The Board has taken over the provision of textiles required for the Army and all Civil Departments of Government. It has been found possible to make India almost entirely self-supporting in the matter of textiles Large orders which had been placed at home for khaki drill, khaki puggree cloth, khaki twill, and Bedford cord have been cancelled, as it has now been found practicable to procure the whole of the army requirements in these materials of Indian manufacture. By the development of local industries it is expected that it will not be necessary to order from England any further supplies of greatcoat cloth, serge suitable for army clothing, brown Holland for lining purposes, and mercerised drab for cap lining. It is hoped that the demands on home for khaki thread will also be greatly reduced. The only items of Army clothing which it appears necessary to import are made up greatcoats and drab mixture uniforms for wear by British troops, also made up flannel shirts for the latter and a certain quantity of flannel and socks to supplement the output of the Indian mills. The output of the latter is gradually increasing, and a corresponding decrease will therefore be made in future demands for these imports. All kit bags required are now being made in India. Shoulder titles and badges both metal and worsted are also being procured of satisfactory local manufacture. Helmets formerly imported, are now entirely replaced by pith hats made in India; and a Wolseley pattern helmet of Indian make has recently been approved by the Medical authorities. All boots required for the Indian Army are made in India. Knives, forks, spoons, razors, spurs and shoulder chains and brushes, formerly all imported, are now largely provided of Indian manufacture.

Priority Branch.—Although the work of this branch is not directly connected with the supply of military needs its activities are having a great influence on local resources. It scrutinizes all Government home indents with the object of cutting out items which can be provided in India. It also refuses to recommend priority for the manufacture in the United Kingdom of articles which it considers could be made in India, the outcome being that it is becoming more and more realised that India must depend more largely on its own resources. In consequence manufacturers are being greatly encouraged to develop their works and increase the resources from which Army as well as civil requirements can be drawn.

Finance Branch.—To advise the Board on all financial questions, to furnish statistics, and to audit, disburse, and keep accounts of expenditure relating to or controlled by the Indian Munitions Board, a branch of the Central War Contoller's office has been formed to work as part of the headquarters organization.

The policy of the Board is to centralize payments at headquarters as far as this is compatible with efficiency and the Finance Branch is thus enabled to assist the Board in watching and controlling the expenditure incurred by the various local officers.

All proposals involving expenditure are referred through this Branch to the Financial Member for concurrence in his capacity as Financial Adviser, Military Finance, (the procedure in this respect being similar to that followed in the Army Department).

General.—Although formal control has not been taken of the Tata Iron and Steel Works, arrangements have been made with the management of this important concern, by which the Government has first lien on its entire output of steel, as mentioned under the heading "Railway Branch" of this note. The quality of the steel used for Government purposes is fully assured by the presence at Sakchi of Dr. A. C. McWilliam, the Munitions Board's Metallurgical Inspector, who, with his staff, carries out the necessary tests to ensure that the steel produced is up to the British standard specifications.

In the Inspection staffs at Bombay and Calcutta, to the latter of whom the charge is entrusted of the Government Test House at Alipore, facilities are provided both for the inspection of structural work in progress in the principal engineering workshops, and also for the testing of materials for the use of Government Departments. More use might be made of these agencies, and the attention of the principal consuming departments has lately been drawn to the advantages which would be drived from a freer utilization of the facilities offered.

The Board is also responsible for the factory at Nasik which is being erected by the Bombay Public Works Department, for the production of acetone ; it is hoped that when this factory is finished it will be able to supply all the acetone required by the Army in India.

DELHI:
Dated the 3rd December 1917.

T. RYAN,
Secretary, Indian Munitions Board.

144IMB—15—196-18—GCPS

INDIAN MUNITIONS BOARD.

Organization and Staff.

Corrected to June 1918.

INDIAN MUNITIONS BOARD.

ORGANIZATION AND STAFF.

Corrected to June 1918.

Under the names of the stations, alphabetically arranged, are details of the Munitions organization. The headquarters staff is shewn under the head "Simla" (see pages 12 to 15). The telegraphic address of each principal officer is shown in brackets [ ] after his name.

The priority organization throughout India is shewn on pages 16 to 17.

An alphabetical list of Munitions Board Staff, including names of gentlemen who are part-time or honorary associates of the Board, will be found in the Appendix at pages 19 to 22.

AGRA.

Army Clothing Factory—

Superintendent . . .	Major C. D. K. Greenway.	[Clothing.]
Assistant Superintendent . .	Lieut. C. A. L. Williams.	

NOTICE.

It is requested that all errors and omissions which may be discovered in this list may be brought to the notice of the Secretary, Indian Munitions Board, Simla.

The Government Tannery is worked for the purpose of putting to practical commercial test the new and improved tanning processes which have shown promise of success in the experimental stages at the Esociet Research Factory at Maihar. (See page 9.) It is hoped that by the success of this demonstration tannery the Government may be able to lead tanners to the adoption of improved methods.

Superintendent, Government Tannery. .	Major E. M. Baily.	[Tannery.]
Assistant to ditto . .	Mr. P. S. Pandit.	

ARUVANKADU (NILGIRIS).

Cordite Factory—

Superintendent . . .	Colonel D. M. Babington, C.I.E. [Cordite.]
Assistant Superintendent . .	Major B. H. Brown, R.A.
Danger Building Officer . .	Lieut. H. H. Wiles.
Manager and Chemist . .	Dr. N. L. Sheldon, Ph.D. (Heid.), F.I.C.
Engineering Manager . .	Mr. J. J. Hull, M.I.M.E., A.M.I.E.E.
Chemists . .	Messrs. L. Leigh Smith, F.I.C., G. S. Butler, A.I.C., and Dr. C. E. McKenzie, Ph.D.
Officer attached to Factory .	Lieut. and Assistant Commy. W. J. Chambers.

BOMBAY.

As the principal port and market for general stores on the west of India, Bombay is of exceptional importance from the point of view of the Indian Munitions Board. It is the place of purchase and manufacture of considerable quantities of materials, and the point of assembly for practically all stores destined for export to Mesopotamia and other Eastern theatres of war. The Board has established a depôt at Matunga where stores of various description are being stocked. The Board is not concerned with shipping, but maintains a depôt through which its supplies pass to the embarkation staff. The principal Munitions staff here are :—

Controller of Munitions, Bombay Circle.	Colonel Sir Lawless Hepper, Kt., R.E.	[Munibom.]
Personal Assistant to ditto . .	Mr. W. C. Shaller.	
Deputy Controller (Stores) . .	Mr. G. R. Webb.	[Constor.]
Assistant Controllers (Stores) .	Messrs. J. T. Fry, A. E. L. Harrison, W. Meyers, G. Greer and Lieuts. P. E. Keyte and L. C. Simpson and 2-Lt. A. J. Gibbons.	
Deputy Controller (Transit) .	Mr. P. J. Gahan.	[Munitrans.]
Assistant Controller (Store Depôt) .	Mr. D. Isaacs.	
Timber Purchasing Officer . .	Mr. P. E. Aitchison.	[Purwood.]
Deputy Controller (Timber Supplies)	Capt. G. W. D. Breadon.	[Muniwood.]
Assistant Controllers (Timber Supplies).	Lieut. S. A. Wallis, Messrs. C. Radmore, E. Sherren and G. E. Jukes.	

The above officers are concerned mainly with purchases, collection and despatch of supplies for the forces overseas.

Assistant Controller (Electrical and Mechanical).	Mr. A. P. Chalkley.

This officer works directly under the Controller (Electrical and Mechanical) who has his headquarters at Calcutta.

Local Manufactures Committee.

Chairman	Mr. T. W. Bonner.	[Munifac.]
Members	Messrs. Bell and F. J. Page.	
Secretary	Mr. W. Henderson.	

The duties of this committee are to control and develop manufacture, and to receive, distribute, and watch compliance with orders both for ordnance and other supplies.

Deputy Controller (Hides) .	Mr. J. W. Macfarlane.	[Hidespec.]
Assistant Controllers (Hides) .	Lieuts. W. D. M. Clarke and L. B. Sutcliffe.	

This staff works in direct relations with the Controller (Hides and Wool) at Calcutta. It controls a Government tannery at Dharavi, Bombay, regulates the supply of tanstuffs in the Bombay Presidency, arranges for the purchase and supply of tanned hides for the War Office and deals with the receipt and disposal of hides, skins, dyes, and wool from Mesopotamia.

Army Clothing Factory (and Depôt)—

Superintendent	CAPTAIN D. RILEY.	[Clothing.]
Assistant Superintendents	LIEUTS. T. E. SPRAGGE-WHITE and F. M. ROCKLEY, 2ND-LIEUT. J. M. MANDUELL, MR. E. R. WOODWARD (Depôt) and CAPTAIN and DEPUTY COMMY. J. McENTEE.	
Textile Expert	MR. A. BAYNE.	

CALCUTTA.

Its geographical situation relative to the theatres of war renders Calcutta of less importance as a port than as a purchasing market. In the latter direction, however, full use is being made of the facilities afforded here. The Munitions staff includes:—

Controller of Munitions, Bengal Circle.	MR. J. C. K. PETERSON,* I.C.S.	[Municutta.]
Assistant Controller of Munitions, Bengal Circle.	MR. J. C. NIXON, I.C.S.	
Deputy Controller (Munitions)	MR. D. L. McPHERSON.	[Dymuns.]
Assistant Controllers (Munitions)	MESSRS. C. A. WILLIAMS, B. ST. J. NEWTON, and F. EASTMEADE and 2ND-LT. W. C. SAVAGE.	
Deputy Controller (Stores)	MR. G. A. MEADE.	[Munistor.]
Assistant Controllers (Stores)	MESSRS. P. D. WOODS and A. N. GREENE.	
Controller (Electrical and Mechanical).	MR. H. BURKINSHAW.	[Munielec.]
Assistant Controller (Electrical and Mechanical).	MESSRS. W. F. MARCHINTON, J. H. DUGDALE and 2ND-LIEUT. H. C. BISHOP.	
Deputy Controller (Inspection)	MR. C. S. WAITE, C.I.E.	

The above officers are engaged in the manufacture, acquisition and despatch (usually *viâ* Bombay) of miscellaneous supplies. The Deputy Controller (Munitions) is in charge of two Government engineering works, the Albion Foundry and the Kutra Iron Works, and in addition to the outturn of these controls the manufacture, in a large number of private workshops, of a wide variety of articles required for military purposes. The Deputy Controller (Inspection) is in charge of the Store Depôt at Narkaldunga.

Superintendent, Local Manufactures and Government Test House, Alipore	MR. H. A. F. MUSGRAVE.	[Slim.]
Assistant Laboratory Officer	MR. H. F. DAVY.	
Assistant Chemist	MR. N. BRODIE.	

The Superintendent of Local Manufactures inspects work in process of execution in local engineering shops, but with the help of the assistants named above, also conducts the operations of the Government Test House at Alipore, Calcutta. This laboratory is well equipped for the mechanical and chemical testing of engineering materials, both metals and others, and of oils, paints and other stores. It is to be regretted that, possibly for want of sufficient publicity in the past, greater use has not been made of the facilities offered here to Government departments as well as to private purchasers.

* MR. Peterson is also for the present Controller of Munitions for Assam.

Controller (Hides and Wool), Indian Munitions Board. — MR. A. C. MCWATTERS, C.I.E., I.C.S. [Munihide.]

Deputy Controller (Hides), Calcutta . . . — CAPT. R. W. MELLOR. [Asthides.]

The latter officer is in direct relations with the Controller (Hides and Wool). He is the Government member of the *Central Committee for Raw Hides Purchases* through which (and its sub-committee at Karachi) large purchases are effected for the War Office.

Controller (Shipbuilding), Indian Munitions Board — LIEUT.-COL. J. MACGREGOR, R.E. [Municraft.]

Deputy Controller (Shipbuilding) . . . — MR. R. G. SOPER.

Deputy Controller (Shipbuilding Design) . . — MR. J. PROUD.

Assistant Controllers (Shipbuilding Design) . . — MR. W. J. F. HUTCHESON and LIEUT. C. A. TOWNSHEND.

Assistant Controller (Shipbuilding Administration) . — LIEUT. C. ANDERSON.

This is a branch of the headquarters establishment of the Indian Munitions Board. It controls the construction and supply of new rivercraft, launches, etc., and of material connected therewith for Mesopotamia and other theatres of war and also of new craft for Coastal Defence purposes. It is also responsible for the development of merchant shipbuilding in India. Repairs to inland and sea-going vessels, other than vessels requisitioned by Government, are also controlled by this Branch.

Controller (Jute Manufactures) . . . — LIEUT.-COL. R. B. WILSON. [Munijute.]

Assistant Controller (Jute Manufactures) . . — LIEUT. T. A. KAY.

The Controller (Jute Manufactures) deals with all demands for articles manufactured from flax in addition to those made from jute and also with all Government demands for tarpaulins.

Army Clothing Factory, Alipore —

Superintendent . . . . . — CAPTAIN W. L. SELLERS. [Clothing.]

Assistant Superintendents . . . . — 2ND-LIEUT. H. M. J. LOEWE, LIEUT. R. H. PAIGE, MAJOR A. F. R. COLQUHOUN, MR. R. MCTIER, 2ND-LIEUT. H. TONGE and LIEUT. and ASSTT. COMMY. A. H. BARSON.

The Director of Ordnance Factories has his headquarters at Calcutta, and the following officers are employed under him :—

Director of Ordnance Factories	Brig.-Genl. H. A. Young, C.I.E. [Ordnance Factories.]
Deputy Director of Ordnance Factories	Lieut.-Colonel G. C. Sturrock, R.A.
Assistant Director of Ordnance Factories	Major T. C. Fraser, R.A.
Financial Adviser	Mr. E. E. Harvey, I.S.O.
Deputy Financial Adviser	Mr. T. E. Mutter.
Engineer in charge of Factory Works Department	Capt. G. E. Rhodes, R E.
Civil Engineer Adviser	Mr. A. T. Weston, M.Sc., A.M.I.C.E.
Additional officers	Mr. C. F. Randall and Dr. T. Royds.
Chief Clerk	Captain and Dy. Commissary C. Digby.

Ordnance Factories Extension Scheme—

Constructional Engineer, Ordnance Factories Extension Scheme, Calcutta	Mr. J. M. Jardine.
Assistant Engineer, Ordnance Factories Extension Scheme (Cossipore).	Lieut. H. McG. Morris.
Ditto (Ishapore)	2nd-Lieut. B. Leigh Newman.
Consulting Electrical Engineer for the Extensions	Mr. A. R. Gundry.
Assistant to ditto	Mr. A. J. Dow.

CAWNPORE.

Controller of Munitions, U. P. Circle	Mr. C. O'Malley. [Muniup.]
Deputy Controller (Munitions)	Lieut. W. J. Craig.
Assistant Controller (Timber Supplies)	Mr. J. F. Blackwood.
Deputy Controller (Hides)	Mr. W. B. Shewan. [Asthides.]
Assistant Controller (Hides)	Lieut. C. E. Webb.

The Deputy Controller (Hides) is in direct relations with Controller (Hides and Wool), Calcutta. He controls the Cawnpore market for raw hides, and arranges for the purchase and supply of cowhides from Cawnpore for the Indian tanners and the British War Office in accordance with fixed specifications and prices.

The Harness and Saddlery Factory at Cawnpore is under the control of the Director of Ordnance Factories. The Superintendent of the Factory is also in charge of the Government Boot Depôt at that station, which is a part of the Army Clothing Department.

Superintendent, Harness and Saddlery Factory, and Government Inspector of Army Boots	Lieut.-Col. F. C. Lane, R.A. [Harness ; Chaussure.]
Assistant Superintendents, Harness and Saddlery Factory	Major G. S. Wilkes, R.A., and Lieut. A L. Blank.
Manager, Harness and Saddlery Factory	Mr. O. Woods.
Officer attached to the Factory	Lieut. and Asstt. Commy. W. H. B. Rix.
Assistant to Government Inspector of Army Boots	2nd-Lieut. G. Trusler.
Supervisor, Boot Stores	Condr. W. G. D. Ventham.
Senior Boot Examiner	Major and Commy. W. Garnett.

COSSIPORE.

Gun and Shell Factory with a branch at Ishapore—

Superintendent . . . . . MAJOR E. PARBURY, R.A. [Shell.]

Assistant Superintendents . . . . . MAJOR C. S. TUTE, R.A. (Ishapore), MAJOR C. E. VINES, R.A., CAPT. R. I. H. KINLOCH, R.A. (Ishapore), and LIEUT. P. J. WHEELER, R.F.A.

Manager . . . . . MR. A. H. HULL, A.M.I.M.E., A.M.I.E.E.

Steel Works Manager . . . . . MR. F. G. WILLIAMS, F.C.S.

Officers attached to the Factory . . . . . CAPTAIN and DY. COMMY. W. J. KENDALL and LIEUT. and ASSTT. COMMY. F. W. KAYE.

DELHI.

Controller of Munitions . . . . . LIET.-COL H. C. BEADON.

[Munidelhi.]

The province and town of Delhi are not of major importance from the point of view of the Indian Munitions Board's organization, being far from the ports and having no industries or markets of great value to the Board. Some advantage may however be taken of it as a source of miscellaneous supplies and the Board is therefore represented by a Controller who is an officer of the provincial administration.

DUM DUM.

Ammunition Factory—

Superintendent . . . . . MAJOR D. G. COWIE, R. A. [Ammunition.]

Assistant Superintendent . . . . MR. A. F. WYLIE, A.M.I.C.E., A.M.I.M.E., A.C.G.I.

Manager . . . . . MR. J. R. SUTTON.

Officer attached to the Factory . . . LIEUT. and DY. COMMY. A. T. PETRIE.

FATEHGARH.

A Government tent factory has been established at this station under the directions of the Controller (Textiles).

Superintendent . . . . . MR. P. GRANTHAM. [Munitent.]

ISHAPORE.

Rifle Factory—

Superintendent	.	Mr. F. S. Grimston, C.I.E., M.I.C.E. [Rifle.]
Assistant Superintendent	.	Major J. Morrison, R A.
Extra Assistant Superintendent	.	Mr. A. W. Connolly.
Officer attached to the Factory	.	Lieut. and Asstt. Commy. M. Cahill.

There is a branch of the Gun and Shell Factory at this station—see under "Cossipore".

JUBBULPORE.

Gun Carriage Factory—

Superintendent	.	Lieut.-Col. E. L. Tomkins, R.A. [Carriage.]
Assistant Superintendent	.	Major L. d'E. Lenfestey, R.A.
Manager	.	Mr. C. W. H. Penwarden, M.I.M.E., W.H.Ex.
Officer attached to the Factory	.	Major and Commy. J. G. Coleburt.

JULLUNDUR.

Army Clothing Factory with a branch at Lahore—

Superintendent	.	Captain S. J. Vessey. [Clothing.]
Assistant Superintendents	.	Lieuts. W. S. Lemon and I. G. M. Garson.

KALIMPONG.

Government Agent for the purchase of Tibetan wool	.	Mr. W. Moor.

He works under the directions of the Controller (Hides and Wool), Calcutta.

KARACHI.

Controller of Munitions, Karachi . . CAPTAIN C. A. PERCY. [Munikar.]

He is a representative of the Munitions Board for general enquiries, and is also in charge of the work in connection with timber and general stores which has hitherto been done by the North-Western Railway administration.

Sub-Committee (Raw Hides Purchases)—

Chairman . . . . . MR. R. F. L. WHITTY, I.C.S. [Customs.]
Collector of Customs.

It works in conjunction with the Committee mentioned on page 4, under "Calcutta".

KIRKEE.

Ammunition Factory—

Superintendent . . . . MAJOR N. S. H. SITWELL, R.A. [Ammunition.]
Assistant Superintendent . . MAJOR A. M. URQUHART, R.A.
Manager . . . . . MR. W. AMOR, M.I.M.E.
Officer attached to the Factory . . MAJOR and COMMY. W. POWER.

Ordnance Factories Extension Scheme—

Constructional Engineer, Ordnance Factories Extension Scheme, Kirkee . MR. J. D. ALLAN.
Assistant to Ordnance Factories Extension Scheme, Kirkee . . CAPTAIN R. MAIR.
General Manager, Kirkee Filling Factory . . . . MR. F. W. JOHNSON.
Assistant Manager, Kirkee Filling Factory . . . . . MR. S. SAUNDERS.

LAHORE.

A good deal of work is done for the Munitions Board at this station, principally in the way of manufacture of articles required by the Ordnance Department.

The Board is represented here by the—

Controller of Munitions, Punjab Circle THE HONOURABLE MR. C. A. H. TOWNSEND, I.C.S. [Munipun.]
Deputy Controller (Munitions), Punjab Circle . . . . . MR. E. A. SCOTT. [Munijab.]

Mr. Scott is an officer of the North-Western Railway and has special facilities for the execution of mechanical work.

Deputy Controller (Timber Supplies), Punjab . . . . . CAPTAIN E. A. GRESWELL.
Assistant Controllers (Timber Supplies), Punjab. { RAI BAHADUR BASANT SINGH and MR. SARDOOL SINGH.

The headquarters of the three Timber Supplies officers are temporarily at Simla. They are concerned, under the Controller (Timber Supplies), with the procuring of large quantities of timber mostly for use by the various military forces which look to India for supplies.

Army Clothing Factory (under the control of the Superintendent, Jullundur)—

Assistant Superintendent in charge . LIEUT. W. S. LEMON.

LUCKNOW.

Deputy Controller (Stores) . . Mr. C. F. Langer [Muniluck.]

He is the Chief Storekeeper of the Oudh and Rohilkhund Railway and helps the Board by procuring materials in the markets to which he has access.

MADRAS.

The Madras Presidency affords a variety of supplies for war purposes, notably it takes foremost place in the supply of tanned hides to the War Office for the manufacture of army boots, the output of these has been greatly increased since the outbreak of the war. The Board is represented at Madras by the—

Controller of Munitions, Madras Circle Mr. C. A. Innes, I.C.S. [Munimad.]
Assistant Controller of Munitions, Madras Circle . . . . Mr. L. B. Green.

Deputy Controller (Munitions) . Lieut.-Col. A. Churchill.

Controller (Tanning materials) . Mr. R. B. Wood, I.C.S. [Munitan.]
Deputy Controller (Hides) . . Captain A. Guthrie. [Asthides.]
Assistant Controller (Hides) . . Mr. R. H. Meredith.

This station is also the headquarters of the
War Office Representative for Hides Mr. J. W. Henderson [Warhide].
Assistant to ditto. . Lieut. W. Bremner Brown.
who, in view of the importance of the leather supply from India, have been deputed to this country to facilitate business and prevent misunderstandings in technical matters.

The Controller (Tanning materials) has been appointed to investigate the question of the supply of tanstuffs in the Madras Presidency. He exercises general control over tanning and tanning materials in the Presidency under the Defence of India rules.

Army Clothing Factory.—

Superintendent . . . . Major W. H. Bowden, I.A. [Clothing.]
Assistant Superintendents . . Lieuts. O. H. Galvin and T. Nickels, 2nd-Lieuts. H. G. Webb and A. G. Buck, and Captain and Commy. G. H. Phillips.

MAIHAR.

Maihar is the capital of a Central India State on the East Indian Railway, near Allahabad, it is of importance to the Indian Munitions Board as the site of the *Esociet Tannin Research Factory.*

Director . . . . . Mr. W. A. Fraymouth, F. C. S. [Esociet.]
Assistants to ditto . . . . Lieut. W. L. Markwick and Mr. S. P. Chaudhuri.

This factory was acquired lately by Government from the coalition of Native States which owned it, and is being managed in the public interests to investigate new tanstuffs and new processes of tanning. Methods which are shewn to be promising are subsequently put to a practical commercial test at the demonstration tannery at Allahabad (see page 1).

Here also is stationed the

Government Tannin Expert . . . Mr. J. A. Pilgrim, M.I.A., L.T.C. [Tannin.]

NAGPUR.

The Board is represented here by the

Controller of Munitions, C. P. Circle. Mr. C. G. Leftwich, I.C.S. [Municent.]

who is also the Provincial Director of Industries.

NASIK.

The Government Acetone Factory is being built for the purpose of producing within India all the acetone required for military purposes in this country.

Superintendent, Acetone Factory	Mr. J. J. Jervase-Hatt.	[Acetone.]
Bacteriologist	Mr. A. Appleyard, M.Sc.	
Engineer	Mr. L. S. J. Thompson.	
Works Manager	Mr. E. J. Poke.	

The erection of the buildings is in charge of the

Executive Engineer, P. W. D. Mr. H. M. Cougens. [Roadenger.]

PATNA.

Army Clothing Factory.—

Superintendent Lieut. S. H. Macdonald. [Clothing.]

RANCHI.

Apart from the products of the Tata Iron and Steel Works, referred to under the head Sakchi, the Province of Bihar and Orissa provides little of the material controlled by the Indian Munitions Board.

For the purposes of general enquiry and action in special cases the Board is represented at the headquarters of the Province by the

Controller of Munitions, Bihar and Orissa Circle Mr. E. L. L. Hammond, I. C. S. [Munibihar.]

who is also Secretary to the Provincial Recruiting Board.

RANGOON.

The Province of Burma is important for munitions purposes as being the principal timber-supplying area (subject to the provision of shipping to take the supplies to destination) as a source of supply of raw hides, and as a port where exist good facilities for shipbuilding. Here are the :—

Controller of Munitions, Burma Circle	MR. J. P. HARDIMAN, I. C. S.	[Muniburma.]
Deputy Controller (Munitions) .	MR. B. RAIKES.	
Deputy Controller (Timber Supplies) .	MR. A. ROUGER.	[Research.]
Assistant Controller (Timber Supplies)	MR. G. J. CALDECOURT.	
Officer on special duty for the collection of tanning materials . . .	MR. R. A. COCHRANE.	

the first, a local Government officer, representing the Board generally, the third engaged wholly in the supply of timber.

SAKCHI.

At this place in Bihar and Orissa are established the Tata Iron and Steel Works, by far the most important single concern in India from the point of view of munitions requirements. The whole output of steel rails and other sectional material is practically controlled by the Munitions Board by agreement with the company. Here are posted the—

Metallurgical Inspector . .	DR. A. MCWILLIAM (on leave). MR. C. A. IRWIN (offg.).
Assistant Metallurgist . .	LIEUT. W. J. TURNBULL, R. E. (offg.).
Assistant Metallurgical Inspector	MR. R. C. ARBERY.

whose duty it is to insure that all materials passed into the service are up to the prescribed specifications.

SHAHJAHANPUR.

Army Clothing Factory.—

Superintendent	CAPT. A. G. R. HORTON BENNETT.	[Clothing.]
Assistant Superintendents . .	LIEUTS. D. J. DAVIDSON, R. E. COOPER, E. HOLT, and C. A. BEASANT, and 2ND-LIEUTS. F. G. LING and P. J. BRYER.	

SIALKOT.

Army Clothing Factory.—

Superintendent	CAPTAIN D. STUART-PRINCE.	[Clothing.]
Assistant Superintendents	LIEUTS. F. J. WATKINS and J. E. NICHOLS.	

SIMLA.

The headquarters of the Indian Munitions Board is located, with that of the Government of India, at Delhi during the winter and at Simla during the rest of the year.

The Board consists of—

President	SIR T. H. HOLLAND, K. C. S. I., K.C.I.E., F. R. S., &c.	
Members	The HONOURABLE MR. G. B. H. FELL, C.S.I., C.I.E., I. C. S. SIR A. R. ANDERSON, KT., C. I. E., C.B.E. MAJOR-GENERAL SIR R. C. O. STUART, K. C. S. I. SIR GEORGE BUCHANAN, KT. K. C. I. E.	

The Secretariat staff comprises :—

Secretary	MR. T. RYAN, C. I. E.	[Muniboard.]
Assistant Secretaries	DR. G. C. SIMPSON, F. R. S. MR. F. R. R. RUDMAN, I.C.S.	
Registrar	MR. R. R. REAKS.	

Major-General F. F. MINCHIN, *Representative of the Ministry of Munitions*, assisted by his Personal Assistant Captain H. DANIELL, is attached to the Board in connection with the Ordnance Factories Extension Scheme.

The following summary shews how the executive branches of the office are grouped for purposes of administration under the several members of the Board, the Controllers, and subordinate officers in each case. The indicating letter is used to facilitate references and, when appearing in correspondence, shews the particular branches from which communications have emanated.

The Honourable Mr. Fell controls :—

F. FINANCE BRANCH.

Deputy Controller of War Accounts	MR. M. R. COBURN.	[Muniaccts.]
Deputy Controllers „	LIEUTS. C. H. SHAW and F. V. RUSHFORTH.	
Superintendent (Finance Branch)	MR. H. D. BANERJI.	

Mr. Coburn acts as the financial officer of the Board under the Financial Member. He also acts as a Deputy to the Financial Adviser, Military Finance, and in this capacity, deals with all questions involving sanction of expenditure. As an accounts officer, he is a Deputy of the Controller of War Accounts. The other officers of this branch are disbursing and audit officers under the supervision of the Controller of War Accounts.

Sir A. R. Anderson is in charge of :—

T. TIMBER SUPPLIES BRANCH.

Controller (Timber Supplies)	. Mr. R. M. Williamson. [Cots.]
Deputy Controller (Timber Supplies) .	. Mr. M. W. Brayshay.
Assistant Controller (Timber Supplies) .	. Mr. R. G. Marriott.
Superintendent	. Mr. F. Dennis.

This Branch controls the supply of timber, and other forest produce to indenting officers both overseas and in India.

R. RAILWAY MATERIALS BRANCH.

Controller (Railway Materials)	. Mr. J. C. Highet.
Superintendent	. Mr. R. B. Vachha.

This branch deals with the provision of Railway materials to war areas, and also controls the supply of steel from the Tata Iron and Steel Works, Sakchi.

W. SHIPBUILDING BRANCH.*

[illegible] GOR.
[illegible] aft.]

Corrigendum.—W. Shipbuilding Branch is in charge of Sir George Buchanan and not Sir A. R. Anderson.

ON.

	. [illegible] C. A. Townshend.
Assistant Controller (Shipbuilding Administration)	. Lieut. C. Anderson.
Superintendent	. Mr. S. C. Datta.

This branch controls the construction and supply of new rivercraft launches, etc., and of material connected therewith for Mesopotamia, and other theatres of war and also of new craft for Coastal Defence purposes. It is also exercised in the development of merchant shipbuilding in India. Repairs to inland and sea going vessels other than vessels requisitioned by Government are also controlled by this Branch.

S. INDIAN INDENTS BRANCH.

Controller (Indian Indents)	. Mr. D. E. Keatinge. [Munila.]
Assistant Controllers (Indian Indents) . .	. Lieuts. R. C. N. Palairet, and C. W. Langer and Messrs. R. J. Oates and G. R. Allison.
Superintendent	. Conductor W. Kenaelly.

This branch deals with the supply of miscellaneous (but mostly of engineering) stores, materials and plant both to indentors overseas and to Government Departments in India.

Owing to the great increase in the number of indents received for disposal by the Munitions Board, and the difficulty of complying with these in the present abnormal state of the markets, it has been found necessary to arrange for the sub-division of the Indian Indents Branch into separate branches, each in charge of a Controller, and responsible for dealing with particular classes of articles. The branches thus decided upon for immediate formation are :—

S. D. .	. Indent distribution, and control of certain articles such as pig-iron and cement, trade in which is regulated at the Board's headquarters.
S. E. .	. Electrical and Mechanical. Already formed at Calcutta.
S. O. .	. Oils and Paints. Under formation.
S. H. .	. Hardware, Implements and Metals. Under formation.
S. M. .	. Miscellaneous Indents branch which will deal with residual indents. The last named branch will ultimately take the place of the existing Indian Indents Branch, and will probably have its headquarters at Bombay.

*It is located in Calcutta.

The following branches work in close association with the Indian Indents branch, as the interests of all four necessarily overlap :—

P. PRIORITY BRANCH.

Controller (Priority) . . . . MR. A. C. COUBROUGH [Munitority.]
Deputy Controller (Priority) . . . MR. R. L. MASON.
Assistant Controllers (Priority) . MESSRS. H. J. D. STOWE and R. PRESTON.
Superintendent . . . . . MR. R. S. D'ARCY.

(1) Controls all Priority Organization (see page 16) dealing with applications for priority assistance for materials required from the United Kingdom and the United States of America.

(2) Co-operates with 'S' Branch in dealing with demands received from indenting officers in India or overseas.

(3) Co-operates with 'I' Branch in the development of Indian Industries.

B. HOME INDENTS BRANCH.

Controller, Deputy Controller and Assistant Controllers . As under 'P.'

Superintendent . . . . . MR. V. DWYER.

The principal items dealt with are :—

(1) Scrutiny of Government indents on the United Kingdom.

(2) References regarding imports and exports.

(3) References regarding the Rules for the supply of articles for the public service.

(4) The development of Indian Industries in co-operation with 'I' Branch.

I. INDUSTRIAL INTELLIGENCE BRANCH.

Controller (Industrial Intelligence) . . MR. R.D. BELL, I.C.S. [Intelligence.]
Assistant Controller (Industrial Intelligence) MR. J. K. MEHTA.
Officers on Special duty . . . . MR. B. A. COLLINS, I.C.S., and DR. J. L. SIMONSEN.
Superintendent . . . . . MR. J. DOYLE.

This branch collects industrial information and disseminates it to other branches and to provincial Controllers and Departments of Industries; it is thus a general clearing house of industrial information. It works in conjunction with the Priority and Indian Indents Branches in developing Indian industries and resources.

In charge of General Stuart are :-

M. CHEMICAL AND MINERAL BRANCH.

Controller and Assistant Controller . . as under 'I.'
Chemical Adviser (on Special duty) . . DR. J. L. SIMONSEN.
Assistant in charge . . . . . MR. D. D. MUKHERJI.

Deals with questions affecting the chemical and mineral industries and their development and the organization of chemical research in India.

H. HIDES AND WOOL BRANCH.*

Controller (Hides and Wool) . . . MR. A. C. MCWATTERS, C.I.E., I.C.S.
Superintendent . . . . . MR. S. K. BANERJI. [Munihide.]

The Controller directs the purchase of tanned and raw hides for the War Office and of Tibetan Wool for use for Government purposes in Indian Mills. He exercises also a general control over tanning in India, under the Defence of India (Tanning) Rules.

*It is located in Calcutta.

X. TEXTILES BRANCH.

Controller (Textiles)	Mr. A. H. Silver. [Munitex.]
Deputy Controller (Textiles)	Major H. B. McKerrow.
Assistant Controllers	Lieut. W. H. Frith and 2nd-Lt. A. Simpson.
Superintendent	Mr. E. O. Sharling.

This Branch controls the purchase in India of all textiles composed of cotton, wool or silk for all Government services and of boots for the Army.

C. CLOTHING BRANCH.

Controller (Clothing)	Major M. Eliot, I. A. [Munielo.]
Assistant Controllers (Clothing)	Capt. K. J. Gabbeit, Lieut. H. M. Bowler, and Mr. R. W. Targett.
Superintendent	Lieut. and Asstt. Commy. E. Johnson.

Through this Branch is exercised control over the several Army Clothing Factories which are under the charge of the Indian Munitions Board.

O. The ORDNANCE FACTORIES BRANCH is in charge of Sir George Buchanan, Member of the Board. At Headquarters are :—

Military Assistant (Ordnance Factories)	Lieut.-Col. C. C. Palmer, R. A.
Superintendent	Lieut. and Assistant Commy. R. Smith.

Working directly under the Board's Secretariat establishment are the under noted branches.

E. ESTABLISHMENT BRANCH.

Superintendent	Rai Sahib J. P. Ganguli.

Here are dealt with all matters connected with the personnel of the Indian Munitions Board—pay, leave, allowances, etc.: also all questions connected with the Indian Defence Force Act.

G. GENERAL BRANCH.

Superintendent	Mr. W. E. McMurray.

This Branch deals with :—

(1) Constitution, powers and procedure of the Indian Munitions Board.

(2) Audit and finance arrangements.

(3) All subjects of a general character which cannot yet be assigned to special branches.

Q. REGISTRAR'S BRANCH which controls the Headquarters Office in general and does miscellaneous work.

Assistant Registrar	Mr. R. A. Halfhide.

Simla is also the temporary headquarters of the three Timber Supplies officers for the Punjab, namely, Captain E. A. Greswell, Rai Bahadur Basant Singh and Mr. Sardool Singh,— see under "Lahore."

PRIORITY ORGANIZATION.

Ajmer-Merwara.—All applications are received through the Chief Commissioner after being scrutinized by the local Priority Committee.

Assam.—All applications are received through the Chief Commissioner. Those articles required for tea gardens are scrutinized in the first instance by the Chairman of the Assam or Surma Valley Branch of the Indian Tea Association, and also, in the case of applications for renewal of machinery, by an approved engineer in each case.

Baluchistan.—All applications are received through the Chief Commissioner.

Baroda.—All applications are received through the Resident at Baroda.

Bihar and Orissa.—All applications are received through the provincial Controller of Munitions, who acts for the Local Government.

Bengal Presidency.—The Controller of Munitions, Bengal Circle, who is also the Director of Industries, Calcutta, is the chief authority, and is assisted by the following special committees :—

(1) Central Tea Committee.
(2) Local Tea Committee, Darjeeling.
(3) Local Tea Committee, Bagdogra Terai.
(4) Local Tea Committee, Jalpaiguri, Doears.
(5) Jute Mills Priority Committee.
(6) General Engineering Priority Committee.
(7) Electrical Priority Committee.

Bombay Presidency.—The chief authority for Bombay is the Collector of Bombay; for Sind, the Collector of Karachi; and for Aden, the Political Resident at that station.

Burma.—The chief authority is the Controller of Munitions, Rangoon, who is assisted by the following Sub-Committees :—

(1) Mineral Sub-Committee.
(2) Oil Sub-Committee.
(3) Rice Sub-Committee.
(4) Timber Sub-Committee.

Central India.—All applications are received through the Agent to the Governor-General.

Central Provinces and Berar.—The chief authority is the head of the local administration who is assisted by two committees, one for the cotton industry of the Central Provinces and the other for the cotton industry of Berar.

Coorg.—All applications are received through the Chief Commissioner.

Delhi.—All applications are received through the Chief Commissioner.

Dhanbad.—This is the headquarters of the Mines Equipment Priority Committee, under the Presidentship of the Chief Inspector of Mines in India. This committee deals with all demands from mines and collieries (other than those from Burma and from gold fields). All applications are submitted by the President direct to the Indian Munitions Board.

Hyderabad.—All applications are received through the Resident at Hyderabad.

Kashmir.—All applications are received through the Resident in Kashmir.

Madras.—The chief authority is the Director of Industries, Madras, who is assisted by two committees, one dealing with cotton and jute mills, sugar factories and steel baling hoops and the other with all other applications.

Mysore.—All applications are received through the Resident in Mysore.

Nepal.—All applications are received through the Resident in Nepal.

North-West Frontier Province.—All applications are received through the Chief Commissioner.

Oorgaum (South India).—This is the headquarters of the Kolar Gold Field Priority Committee under the Presidentship of the Chairman, Kolar Mining Board. This committee deals with all applications for priority assistance emanating from the five gold mines operating on the Kolar Gold Field as well as from the two gold mines in the district of Anantapur, Madras Presidency, and the Hutti (Nizam's) Gold Mines, Limited, operating in the Hyderabad State. All applications, after being dealt with and endorsed by the Chairman of the Committee, are submitted direct to the Indian Munitions Board.

Punjab.—All applications are received through the Financial Secretary to the Local Government, after being scrutinized by the Director of Agriculture and Industries, who is also the Provincial Controller of Munitions.

Sakchi.—The Metallurgical Inspector to the Munitions Board, who is stationed here, scrutinizes all applications from the Tata Iron and Steel Works and submits them, with his recommendations, direct to the Indian Munitions Board.

Sikkim.—All applications are received through the Political Officer, Sikkim.

United Provinces.—The chief authority is the Director of Industries, Cawnpore.

NOTE.—The Controller of Printing, Stationery and Stamps, Calcutta, has constituted a local priority authority for the whole of India and Burma for the purpose of examining all applications for priority assistance for stationery and printing press materials required from the United Kingdom. All such applications are, however, in the first instance, submitted to existing local authorities who, after scrutiny, forward them to the Controller of Printing, Stationery and Stamps, for further scrutiny. The latter passes on the applications to the Board with his recommendation.

APPENDIX.

*Alphabetical List of Staff * under the Indian Munitions Board. Corrected to June 1918.*

Names.	Designation.	Office.	Telegraphic Address.
Aitchison, P. E.	Timber purchasing Officer	Defence Yard, Mazagaon, Bombay.	Purwood, Bombay.
Allan, J. D.	Constructional Engineer, Ordnance Factories Extension Scheme, Kirkee.	Kirkee	...
Allison, G. R.	Assistant Controller (Indian Indents).	Indian Munitions Board, Simla.	...
Amor, W., M.I.M.E.	Manager, Ammunition Factory	Kirkee	...
Anderson, Sir A., Kt., C.I.E., C.B.E.	Member, Indian Munitions Board.	Indian Munitions Board, Simla.	...
Anderson, Lieutenant C.	Assistant Controller (Ship building Administration).	1, Kyd Street, Calcutta.	...
Appleyard, A., M.Sc.	Bacteriologist, Acetone Factory.	Nasik	...
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* Includes officers of other Departments and other gentlemen who act as representatives of, or otherwise assist, the Indian Munitions Board.

Names.	Designation.	Office.	Telegraphic Address.
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